

Missouri Department of Transportation Specifications for 35' Truck Mounted Telescopic Aerial Platform and Cab/Chassis

Work Platform

Shall be an inverted "A" sub-frame with steel frame expanded metal floor and light wall tubular rails. Detachable platform support fitted to end of telescoping section with 2" diameter platform pivot shaft. Equipped with safety chain on opening and two safety lanyard attachment loops. Two safety harnesses with 72" lanyards to be provided. Platform to have standard rating of 1,000 lbs.

Platform Leveling System

Hydraulic "closed" system consisting of twin platform cylinders interacting with a boomactuated master cylinder mounted in boom support turret. System provided with factory-set relief valves to compensate for oil expansion or overload during platform leveling operation. Remote re-leveling controls provided in platform and at ground controls to give precise re-leveling capability.

Platform Controls

Boom ground controls are mounted in the base assembly on curbside. Remote controls for boom operations from platform operate from a removable remote control box. Hi/Lo range, start/kill, and engine speed toggle controls are also located at platform. Electric remote control cable extends through the column to cable carrier on side of boom to extending boom sections.

Lower Control Box

Steel box with lockable door on curbside at turret base.

Outrigger Controls

Multi-section parallel open-center stack valve for lever-operated control of right and left main outriggers located in lower control box.

Outriggers

Outriggers to be "H" type.

Rotation

360 degrees non-continuous. Hydraulic motor drives turret through gear box. An external hex drive is to be provided for manual rotation in case of hydraulic failure.

Frame

One piece, all welded, box-type fabrication with integral outrigger mounts, oil reservoir tank and controlled mounts.



Turret

Reverse offset turret is one-piece weldment. Turret rotates on large diameter ball bearing.

Boom

High strength steel rectangular tube sections with ¼" wall thickness. Assembly includes heavy-duty cylinder fittings, pivot pins, and replaceable wear pads.

Boom Extension

One 2-1/2" internal cylinder extends the outer boom section.

Cylinders

All cylinders use micro-honed cylinder tubing, chrome shafts, top grade packing and protective rod wipers. Cylinder-mounted holding valves provided on all load holding cylinders.

Hoses

All high pressure hose is wire braid reinforced with a minimum safety factor of 4 to 1.

Oil Tank Capacity

35 gallon remote mounted.

Hydraulic System

Operating pressure approximately 2,000 PSI. System is parallel open-center type and is equipped with liquid-filled pressure gauge. Oil is supplied to upper cylinders through hoses in center of turret to cable carrier along side of the boom.

<u>Pump</u>

Gear type, direct mount to truck PTO. 12 GPM @ 2,000 PSI on high engine speed.

Cab Equipment

PTO cable and HI-REACH master control switch with indicator lights installed in truck cab. Engine speed control and start/kill installed with control switches in platform remote control box and also located in lower control box. U/L approved 5:BC dry chemical fire extinguisher installed in truck cab.

Operators Manual & Video

Two copies of operation, maintenance, safety and parts manual provided with each unit. Operational and safety video provided at delivery.

Installation

Unit installed on vendor-supplied truck, painted, system and tank filled with oil, tested, inspected, certified and ready to operate.



Paint

Cab/chassis to be "Highway Yellow". The aerial device shall be standard manufacturer's white.

Cab / Chassis

Diesel engine, horsepower to be minimum 250hp. Approximately 102" CA. RBM 900,000 in-lb. per rail, 8,000 lb. front axle and 25,500 lb. GVWR, or manufacturer's recommended GVWR. Trucks must have extended rear frame. Increased cooling, heavy-duty front and rear springs 12V electrical system with high capacity alternator, cab clearance stop/tail/backup lights, and I.D. lamps. Minimum 50-gallon fuel tank. Allison automatic transmission with T-Bar type shift control. Air brakes with an air dryer. Air seats, air horn, power steering, air conditioning, intermittent wipers, AM/FM radio, rubber floor mats.